

#### ABSTRACT

An antenna device of the invention has a configuration in which a first radiation plate and a second radiation plate of which diameter or one side is about  $1/2$  wavelength in electrical length are disposed on a ground plate at an arbitrary interval, a first power feed port and a second power feed port provided on the first radiation plate are disposed so that the straight lines linking each power feed port position and the middle point of the first radiation plate may be orthogonal to each other, a third power feed port and a fourth power feed port provided on the second radiation plate are disposed so that the straight lines linking each power feed port position and the middle point of the second radiation plate may be orthogonal to each other, and these straight lines are disposed to have an angle of 45 degrees to a straight line linking the first power feed port position and the middle point of the first radiation plate and to a straight line linking the second power feed port position and the middle point of the first radiation plate.